Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A method for program debugging, the method comprising:

[[(a)]] setting a plurality of breakpoints corresponding to a plurality of events in an implementation under test, each event being a test executed to a peripheral device and taking a general processing path when the peripheral device is working well or an error processing path when the peripheral device is in an error state;

[[(b)]] executing the implementation under test for outputting a diagnosis code of a breakpoint;

[[(c)]] resetting a parameter to simulate the peripheral device being in the error state throughout execution of the event corresponding to the diagnosis code; and

[[(d)]] executing the event corresponding to the diagnosis code according to the reset parameter for making the event undergo the error processing path.

Claim 2 (currently amended): The method of claim 1 further comprising:

after executing the event corresponding to the diagnosis code according to the reset parameter for making the event undergo the error processing path, ~~step (d), repeating steps (b) to (d)~~ for making the implementation under test make all events undergo the error processing ~~path.~~ path, repeating the steps of executing the implementation under test for outputting the diagnosis code of the breakpoint, resetting the parameter of the event corresponding to the diagnosis code, and executing the event corresponding to the diagnosis code according to the reset parameter for making the event undergo the error processing path.

Claim 3 (original): The method of claim 1 wherein the breakpoints are set ahead of program codes of the corresponding events.

Claim 4 (original): The method of claim 1 wherein the breakpoints are set after program codes of the corresponding events.

Claim 5 (cancelled)

Claim 6 (previously presented): The method of claim 1 wherein the error processing path produces an audible tone.

Claim 7 (previously presented): The method of claim 1 wherein the error processing path causes a system reset.

Claim 8 (previously presented): The method of claim 1 wherein the error processing path causes a system execution interrupt.

Claims 9-16 (cancelled)

Claim 17 (new): The method of claim 1 further comprising:

executing the implementation under test until the diagnosis code of the breakpoint matches a predetermined diagnosis code before resetting the parameter of the event corresponding to the diagnosis code, and executing the event corresponding to the diagnosis code according to the reset parameter for making the event undergo the error processing path.

Claim 18 (new): A method for program debugging, the method comprising:

setting a plurality of breakpoints corresponding to a plurality of events in an implementation under test, each event being a test executed to a peripheral device and taking a general processing path when the peripheral device is working well or an error processing path when the peripheral device is in an error state;

setting a parameter to simulate that the peripheral device is working well throughout execution of the implementation under test;

executing the implementation under test according to the parameter for outputting a diagnosis code corresponding to each breakpoint;

for each breakpoint, determining whether the diagnosis code matches a user defined diagnosis code; and

resetting the parameter to simulate that the peripheral device is in the error state and executing the event corresponding to the diagnosis code according to the reset parameter for making the event undergo the error processing path when it is determined that the diagnosis code matches the user defined diagnosis code.

Claim 19 (new): The method of claim 18 further comprising continuing execution of the implementation under test to a next breakpoint without resetting the parameter when it is determined that the diagnosis code does not match the user defined diagnosis code.